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ABSTRACT

To serve educators and administrators interested in planning curriculum articulation in vocational education, this resource guide addresses problems and procedures basic to that effort. It offers applicability and generalizability across vocational programs, from pre-vocational through college levels; to "external" resources, such as business/industry/labor groups, advisory boards and councils, and legislative bodies; to other educators and agencies dealing with special student populations; and to private vocational training programs. Its two sections--Planning and Implementing Articulation--offer brief surveys and step-by-step ways to recognize needs, approach local coordinators, set up coordinating committees, administer surveys, and rank student competencies in order of importance so as to allow for advanced placement, open entry/open exit programs, and to take advantage of a suggested competency-based student achievement record. Appendixes include charts, evaluation forms, a list of catalogs (either available or under development) on various job titles, and a Directory of Curriculum Articulation for Wisconsin. (CP)

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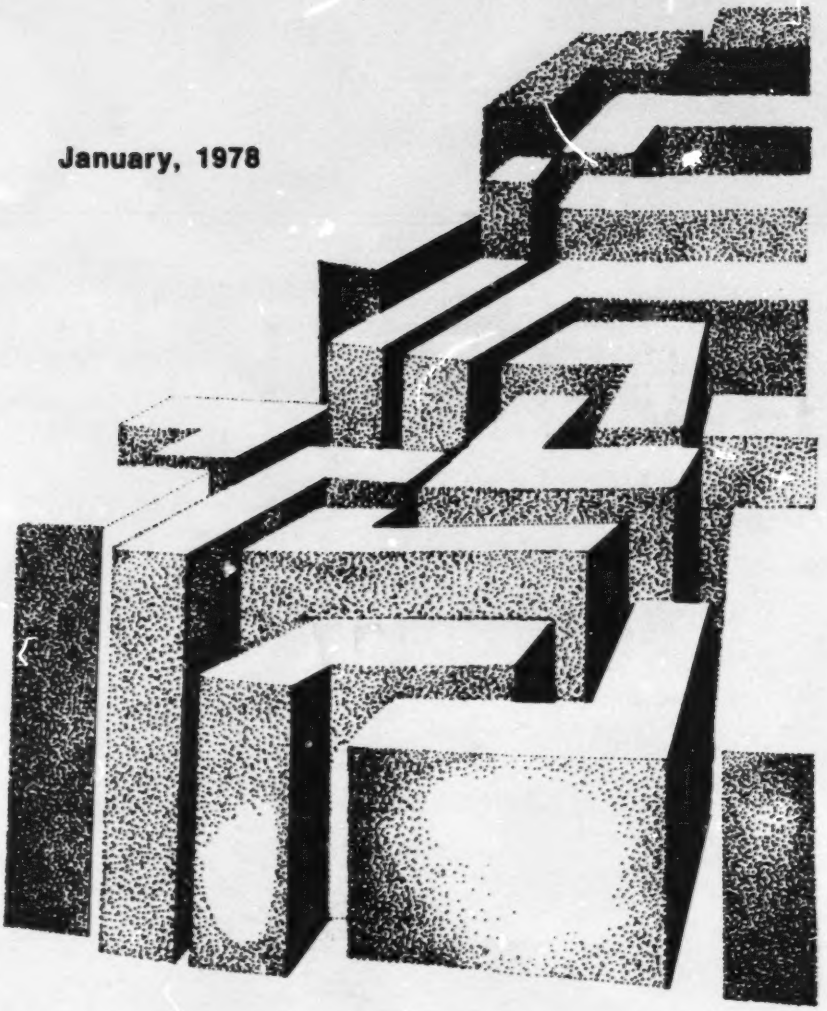
A Process for Planning and Implementing a Curriculum Articulation Effort

January, 1978



WISCONSIN BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION

CE 022 375

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FOREWORD

Increasing emphasis during the present decade upon vocational education in our secondary and post-secondary schools has resulted in improved offerings to students preparing for their occupational futures. High schools and vocational technical schools must make a joint effort to take advantage of these offerings and alleviate some of the problems students experience in making the transition from secondary to post-secondary schools. A major problem is an excessive amount of repetition in educational experiences. When this situation exists, students, upon enrolling in the post-secondary schools, should be encouraged to challenge courses in order to receive advanced status. Curriculum articulation is an attempt to implement this idea.

The vocational education delivery systems in Wisconsin are dedicated to the development and maintenance of comprehensive articulated programs for the common good of the student. This booklet will contribute to this effort.

PREFACE

This booklet was prepared within the Bureau of Research, Professional and Student Development, at the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE). Its primary purpose is to illustrate some of the proven techniques of planning and implementing curriculum articulation efforts between the secondary and post-secondary vocational education programs.

When discussing articulation between institutions representative of diverse grade levels and student age groups, we are talking about one of the most frequently mentioned but least implemented articulation opportunities available to educators today. The lack of this kind of articulation is one reason for repetition in students' learning experiences, a situation which depletes motivation to acquire subject matter knowledge and skills. Vocational education can no longer afford to ignore a pro-active approach to insure articulation among the different levels of vocational education programs, e.g., secondary programs, adult education programs, technical programs and others.

Some students at each level of these vocational programs may be appropriately placed in a different level. Lack of knowledge about available vocational programs for students, perpetuated by the continuing lack of staff articulation efforts, could contribute to a loss of students in vocational education programs.

There are other unrealized opportunities which articulation offers, but it is our goal to address the basic problem impacting the future development of vocational education articulation efforts. Most important in this process is the vocational educator's sensitivity to our articulation opportunities. It is hoped that this booklet will provide the incentive for vocational educators to change opportunities into realities.

The specific objectives of this booklet are as follows:

(1.) To serve as a resource to educators interested in planning curriculum articulation of vocational education programs between secondary and post-secondary programs.

(2.) To operationalize past articulation models so that a step by step process can be implemented when working with occupational tasks and competencies.

(3.) To encourage institutions in the development of a curriculum articulation program.

(4.) To develop a means of saving time for institutions during the planning and implementation phases of the articulation efforts.

This booklet was prepared by John Farah, an Educational Services Assistant (ESA) working at the WBVTAE on curriculum articulation. Persons desiring to obtain copies of this booklet are encouraged to call or write to the Wisconsin Board of VTAE, 4802 Sheboygan Avenue, 7th Floor, Madison, Wisconsin 53702.

ARTICULATION

Definition and Rationale

"Articulation" is a noun, of Latin derivation, defined in Webster's dictionary as "the action or manner of joining or interacting" and also as "the act of giving utterance or expression; the act or manner of articulated sounds." The conventional use of the word in education is with the joining denotation - e.g., the coming together of people and materials representative of different segments of the educational community for the purpose of sharing information and, possibly, of active collaboration in spheres of common concern. Is it possible that the dichotomy between the two definitions of this word has contributed to the problem of the word being used with little or no sense of joining?

Articulation is one of those words used to fill endless policy documents or to impress various audiences. It may be found in nearly every educational policy report, in a wide range of education evaluation instruments, in training materials and programs for all specific educator roles, and in the general resource materials intended to assist educators in improving the system. It would seem, therefore, that articulation has general acceptance as a useful educational concept.

In vocational education, there exists a tremendous need for articulation efforts among various groups such as staff, advisory groups, students and administration on local, county, state and federal levels. Articulation is also needed (1) across pre-vocational offerings, secondary programs, adult education programs, vocational-technical programs, and college and university programs; (2) with "external" resources such as business/industry/labor, state and federal advisory councils, secondary and post-secondary statewide governing boards of vocational education, appropriate legislative committees, employment development departments, federal and state workforce training programs; and (3) with other educators and agencies dealing with the same "special" student populations, such as disadvantaged and handicapped; and (4) with private vocational-training programs and vocational student organizations, as well as with the surrounding communities - at-large represented by the governing boards of local educational agencies.

In short, the functioning arenas of vocational education in which articulation is possible, if not operational, are vast.

PLANNING ARTICULATION

In recent years, much has been said and written about the articulation concept and its application to students making the transition from secondary to post-secondary vocational education programs. But few writers have directed their attention to the actual "hands-on" process of planning and implementing articulation efforts.

Dr. Stanley Spanbauer, Instructional Services Administrator, Fox Valley Technical Institute, Appleton, Wisconsin, has recently developed in concert with his doctoral dissertation a model for articulation effort booklet which discusses four phases of an on-going articulation effort.[1] He lists the four phases as: the planning phase, the developmental phase, the implementation phase, and the evaluation phase. See Appendix A. The model is a very useful tool for educators interested in a quick and easy process for incorporating an articulation effort. However, for educators unfamiliar with the articulation concept, including the initial signs of the need for a school to become involved in such an effort, this booklet was developed.

The articulation process can begin once the need for it is recognized. All too frequently unncessary competition arises between secondary and post-secondary educators which places a burden on students, confuses the public, and drains all of our limited resources in the form of tax dollars, facilities, and programs. Overlapping curriculums and facilities among

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[1]Stanley J. Spanbauer, Bridging the Gap - A Model for Articulation Between Secondary and Post-Secondary Vocational Educators in Wisconsin; (The Fox Valley Technical Institute Educational Resources Center, Appleton, WI, 1977).

secondary schools and colleges has led legislators in some states to demand that better coordination be brought about--or else.[2] Once the need for articulation is recognized, a committee can look into the causes and nature of duplication in specific curriculum areas, establish a ranking of competencies, and obtain agreement among the schools as to division of future offerings.

Vocational curriculum articulation usually begins when a post-secondary instructor or guidance counselor realizes that some students have already acquired, through work experiences or a previous secondary level vocational program, competencies being addressed in his or her classroom instruction. As a post-secondary instructor, you can detect the existence of this problem in several ways:

(1) By asking students to complete a informational questionnaire of their past academic and occupational experiences.

(2) By looking over the course outlines of those high schools which offer vocational programs similar to yours. You can examine many of these outlines while you are serving on high school vocational education advisory committees.

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[2]James C. Cantania, Articulation, A Proposal for Action; (Waukesha County Technical Institute, Waukesha, Wisconsin, December, 1977).

(3) By following up on students who drop out or job out of your classes within the first few weeks.

(4) By being attentive to students who are complaining about repetitious course material.

(5) By following up on students who are not putting forth a concerted effort to get involved in classroom discussions, take notes, etc. but who perform well on examinations or projects. All this could indicate that these students are already competent in the area and should be given consideration accordingly.

(6) By examining student achievement records.

As a secondary instructor, the need to articulate can be recognized in some of the following ways:

(1) By looking over the course outlines of those post-secondary courses that are also taught by you and to assess the competencies that are being covered.

(2) By asking why students within your program who could benefit from further training by attending the VTAE institute are not planning to do so.

(3) By realizing that past graduates of your program who have graduated from the VTAE institute in a similar program are not getting any better jobs because of the additional training.

(4) By observing student behavior when discussing the compliment program offered at the VTAE institute.

Once the need for curriculum articulation is positively identified, the next step is for the secondary instructor to contact his or her local vocational education coordinator (LVEC) or for a post-secondary instructor, to contact the designated articulation catalyst within the VTAE district and to solicit their cooperation with the articulation efforts. With their help, a meeting between the institutions (secondary/post-secondary) should be set up to discuss the possibility of a joint effort to develop an articulation project, with the long-range objective of eliminating the duplication of teaching competencies to students who make the transition from secondary to post-secondary vocational education programs. Some of the people to be included on this committee would be: the local vocational education coordinator (LVEC), secondary teacher, post-secondary teacher, the curriculum specialist of the VTAE school, and local business people. An optimistic outcome of this committee's efforts will be a better articulated working relationship between the staffs and administrators of the secondary and post-secondary institutions.

If everything is positive at this point, the committee may decide to write an articulation project proposal for submission to the WBVTAE for funding, the state consultant for articulation should be contacted regarding feasibility of such a project (See Appendix B). If funding is not desired, there is no need to write a proposal for the WBVTAE; however, it is recommended that the articulation consultant be informed of the intention to begin an articulation effort. This is especially important for two reasons. The experience of other articulation projects can be utilized to save time and expense on a similar project; and if in the future WBVTAE funding is desired, the consultant will be aware of the committee's progress and could serve as an advocate for the project's funding.

The next order of business the committee must address itself to is the investigation of who is teaching what competencies. A matrix type questionnaire should be developed and sent out to all schools within the VTAE district, including the VTAE school, all Comprehensive Education Training Act Programs (CETA), and Concentrated Employment Program Training (CEPT), requesting a list of all the courses that are taught within a specific program area (See Appendix C). The results of this questionnaire should reveal what courses are being taught and at what levels. It may also reveal needed courses that are not being taught.

The committee should work on the development of a competency-based questionnaire/survey form consisting of a listing of task competencies in those courses shown to be duplicative between schools. This questionnaire should ascertain which tasks, competencies or performance objectives are taught in the various schools. Staff may also be asked to indicate at which levels they think the competencies should be taught. This is done so that the competencies can be later prioritized in rank. The initial list of competencies can be obtained through a variety of sources such as (a) Vocational-Technical Education Consortium of States (V-TECS) (See Appendix D), (b) other final reports (See Appendix E), (c) Educational Resources Information Center (ERIC)/Abstracts of Instructional Materials (AIM)/Abstracts of Research Materials (ARM), and (d) Dictionary of Occupational Titles (DOT). If these sources do not list the competencies that the committee feel are needed for the job, alternative methods would be for the articulation committee to brainstorm competencies they believe necessary for gainful employment within that specific area and or survey local industries.

In any event, competencies need to be prioritized and ranked by their level of importance before they are taught. This is probably one of the most important steps in the articulation process. It should be completed at a meeting of all the teachers, after a survey of the secondary and post-secondary teachers and

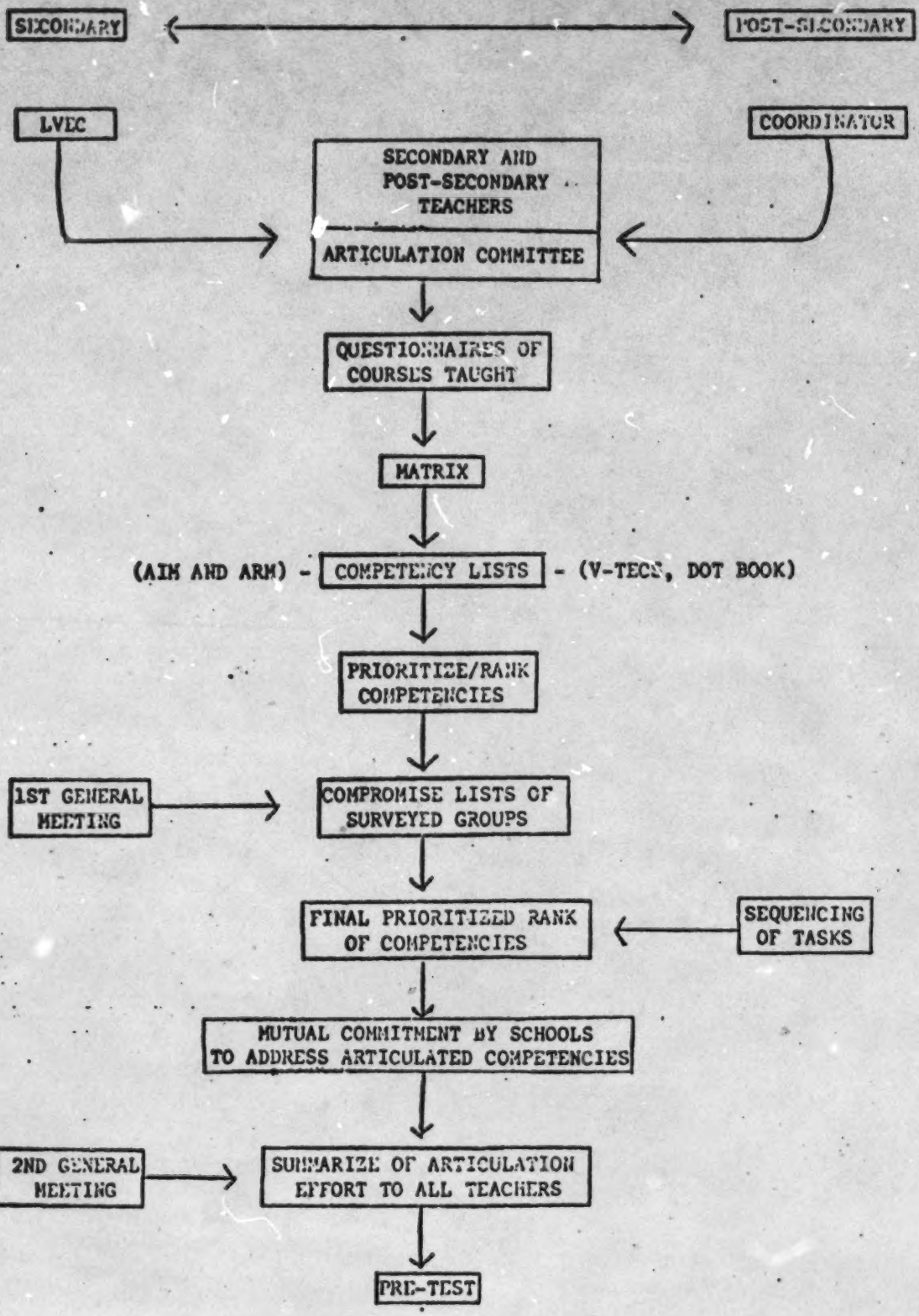
the business community has been done. In the survey, respondents should be asked to rank by importance, the competencies that they feel are necessary for gainful employment in their fields. Once the instruments have been collected and tabulated, a matrix can be developed from each group questioned to determine how they prioritized and ranked the competencies. If the competency rankings are not compatible between the groups, work sessions at the teachers' first meeting must be conducted to determine if a compatible rank order can be developed. Once this is accomplished, the teachers' final ranking can be compared to the business community's ranking to determine how far apart the groups are in their estimation of the importance of the competencies. If the groups are far apart on some competencies, the teachers rankings may become the final lists. This decision is entirely up to the articulation committee. One articulation committee when faced with incompatible competency rankings re-evaluated the sample and asked the respondents to prioritize and rank each competency with as much flexibility as possible. This process did bring the two sets of results somewhat closer. The entire procedure of ranking competencies is the goal of the first meeting of all the teachers, see table 1.

The articulation committee should try to meet within one week following the first group meeting to pull together the revised priority competency list and develop an instrument ranking of the competencies from one to N. This instrument should be mailed out to all secondary teachers; they should be asked to check off the competencies they feel students should satisfactorily accomplish in order to pass a pre-test when they enroll in the VTAE school. Once collected and tabulated, this information hopefully will reflect specifically what competencies many, if not all, the secondary schools have agreed to teach their students before they enroll in the VTAE school.

The articulation committee may also want to suggest a sequence of competencies for instructional purposes.

A second meeting of all the teachers (secondary and post-secondary) should be called at this time to discuss the competencies and to summarize the entire articulation process up to this point. As an example, the summary may indicate that when all the surveys were tabulated the articulation committee agree upon 65 competencies which students needed in order to be gainfully employed within a specific vocational area, and that all the secondary schools within the district agree that they would teach the first 15 competencies. (If some schools say that they would be able to teach more than 15 competencies, this would even be better.) The VTAE school in turn would then teach the rest of the competencies after the students have shown proficiency through passing a pre-test which should be developed at this meeting by the entire group. One of the major benefits of involving both levels of instruction in the development of a pre-test is that the secondary teachers will know what is going to be expected of their students and will be sure to cover the first 15 competencies. Also, the post-secondary teachers will have more confidence in the pre-test because they know that all relevant parties were involved in its construction.

Since the preceding pages have quickly explained the many steps and procedures of the articulation effort, the following diagram should be helpful in pulling the material together.


SECONDARY
POST-SECONDARY
LVEC
COORDINATOR
SECONDARY AND POST-SECONDARY TEACHERS
ARTICULATION COMMITTEE
QUESTIONNAIRES OF COURSES TAUGHT
MATRIX
(AIM AND ARM) - COMPETENCY LISTS - (V-TECS, DOT BOOK)
PRIORITIZE/RANK COMPETENCIES
1ST GENERAL MEETING
COMPROMISE LISTS OF SURVEYED GROUPS
FINAL PRIORITIZED RANK OF COMPETENCIES
SEQUENCING OF TASKS
MUTUAL COMMITMENT BY SCHOOLS TO ADDRESS ARTICULATED COMPETENCIES
2ND GENERAL MEETING
SUMMARIZE OF ARTICULATION EFFORT TO ALL TEACHERS
PRE-TEST

Implementing Articulation

To implement an articulation effort requires both open mindedness and dedication. In order to bring such an effort to completion, participants must be concerned that competent students be granted advanced placement or advanced standing within the post-secondary vocational education program.

Typically in post-secondary education programs, classes are made up of students with varied educational and occupational backgrounds. Many post-secondary classes consist of both students from productive and well organized secondary vocational education programs and students with little or no previous training. These classes are also likely to contain students returning to the classroom for additional training after being on a job for several years (the average age of the VTAE student is 26); students who have completed a baccalaureate degree but have not acquired the necessary skills to be gainfully employed in the career of their choice. It is this kind of mixture that causes concerned vocational educators to look into ways of awarding already competent students advanced placement or advanced standing within a given course. A competency-based student achievement record initiated at the secondary level would facilitate placement at the post-secondary level.

The pre-test discussed with reference to the planning phase gives the instructor the first opportunity to assess competencies and determine the proper placement of students. The instructor should administer it on the first day of class and have the results ready for discussion the next time the class meets.

The question of how to handle students with potential advanced placement or standing is as much an administrative concern as it is an instructional one. For example, the articulation committee, through the planning steps discussed in the first part of this paper, devised 65 competencies needed for gainful employment in this occupation. Assume, further, that of the 15 students in the class, five students have had no prior training two students have mastered 30 of the competencies, four students have mastered 50 of the competencies, and four have mastered all 65 competencies. Now the real question has to be answered. Should this program be designed around the needs of the students or are the needs of the students going to be imposed by the organization? There are several ways in which this situation can be addressed.

The first priority should be to allow the instructor time for individualized instruction, with a plethora of alternative learning activities, or at least time to work with students who have shown competence, or lack of competence in a particular course. Second, a model should be developed which would enable students to sit in on classes for which they are not registered. Third, a plan for an open entry/open exit program would enhance the articulation effort.

The instructor, once he or she has evaluated the pre-test, should assess the standing of each student in relation to the objectives of the course as determined before the beginning of the semester. Thus, if the instructor in our example has determined that in the first month of instruction 30 of the 65 competencies will be satisfied, six students in the class would be eligible for advanced placement or advanced standing for this period, with four of the six students eligible for an even longer period of excused time. Four other students have mastered all 65 competencies and should be given test out status.

In summary, four students should receive regular, daily classroom instruction, two students are 30 days ahead of these four and could conceivably opt for some other area of career development. Four students could be out for more than four weeks of regular classroom instruction and four others have already completed the competencies necessary for this course. The question of what to do with the students who have passed some of the competencies while the rest of the class catches up is a critical one. It is often this problem that discourages instructors and administrators from considering articulation, advanced standing, open entry/open exit and other individualized instructional techniques.

There are several ways of dealing with a student who has passed some of the course competencies. A student can be given advanced placement through individualized instruction, or the student can take leave of class and return once the others have reached a given competency level. During this absence a number of alternatives are possible. The student could (a) sit in on other classes that he or she would not ordinarily have time for, (b) do an internship with an employer in an area he/she is perhaps interested in as a career, (c) visit any number of businesses to get a better idea of job expectations upon graduation, (d) work with the instructor in class as a tutor, aide, etc., (e) take some advanced work or project related to the course, (f) choose from a list of suggested course electives designated by the institution, (g) merely do nothing and return when the class catches up, (h) participate in the career assistance lab for career awareness.

This problem of diverse student backgrounds has implications for development of short remedial or refresher type units of instruction and implementation for testing, evaluation and placement.

Whatever line of action is agreed upon between the instructor and the student, the ultimate decision must be the student's; however, the student must clearly understand that when the class has reached his or her competency level, he or she must return to the regular class schedule in order to be granted credit.

Students face many problems when entering a post-secondary program. It is important that they be well informed about the opportunities as well as the requirements of their chosen career. In many instances they need advice or assistance in making a career choice. It is important that students be accurately accessed when entered into a program; they should be given the opportunity to begin it at the point of exit from high school or former employment or military experience. For some students this necessitates advanced placement and for others it may indicate the appropriateness of developmental programs. The implementation of the suggested alternatives will assist in alleviating such problems as program entrance, identification of deficiencies, advanced placement, transfer of occupational courses, evaluation of credits, and individual differences among students.

Curriculum articulation between post-secondary and secondary vocational education programs is a technique that will aid in awarding students credit for acquired skills and thereby enhance the effectiveness of vocational education in Wisconsin.

To assist the reader in seeing the entire vocational education network of Cooperative Education Services Agencies and the Vocational, Technical and Adult Education Inststutions, Appendix F was added.

The ArticuModel

Planning

- 1.1 Steering Committee is Formed
  - 1.1.1 Organizational Meeting held
  - 1.1.2 LVECC appoint members
  - 1.1.3 Technical School appoints members
- 1.2 District Vocational staff surveyed*
- 1.3 Survey analyzed by steering committee
  - 1.3.1 Objectives formulated
  - 1.3.2 Priorities established
  - 1.3.3 Program area selected for current year
  - 1.3.4 Five year plan developed*
  - 1.3.5 Tentative budget prepared
- 1.4 Proposal Project written
- 1.5 Project participants selected
  - 1.5.1 Orientation meeting held*
  - 1.5.2 Instructors volunteer to participate*
  - 1.5.3 Participants selected
  - 1.5.4 School administration receives progress report*

- 1.6 Project Coordinator selected
  - 1.6.1 Coordinator's job description written*
  - 1.6.2 Individual appointed
  - 1.6.3 Job description and appointment approved by individual's supervisor
- 1.7 Project activities planned
  - 1.7.1 Objectives written
  - 1.7.2 In-service activities identified
  - 1.7.3 Project calendar developed*
  - 1.7.4 Newsletter prepared and mailed to participants*
- 1.8 Project budget adopted
  - 1.8.1 Budget prepared*
  - 1.8.2 Budget submitted to VTAE School Board
  - 1.8.3 Budget submitted to Secondary School Boards
  - 1.8.4 Budget approved

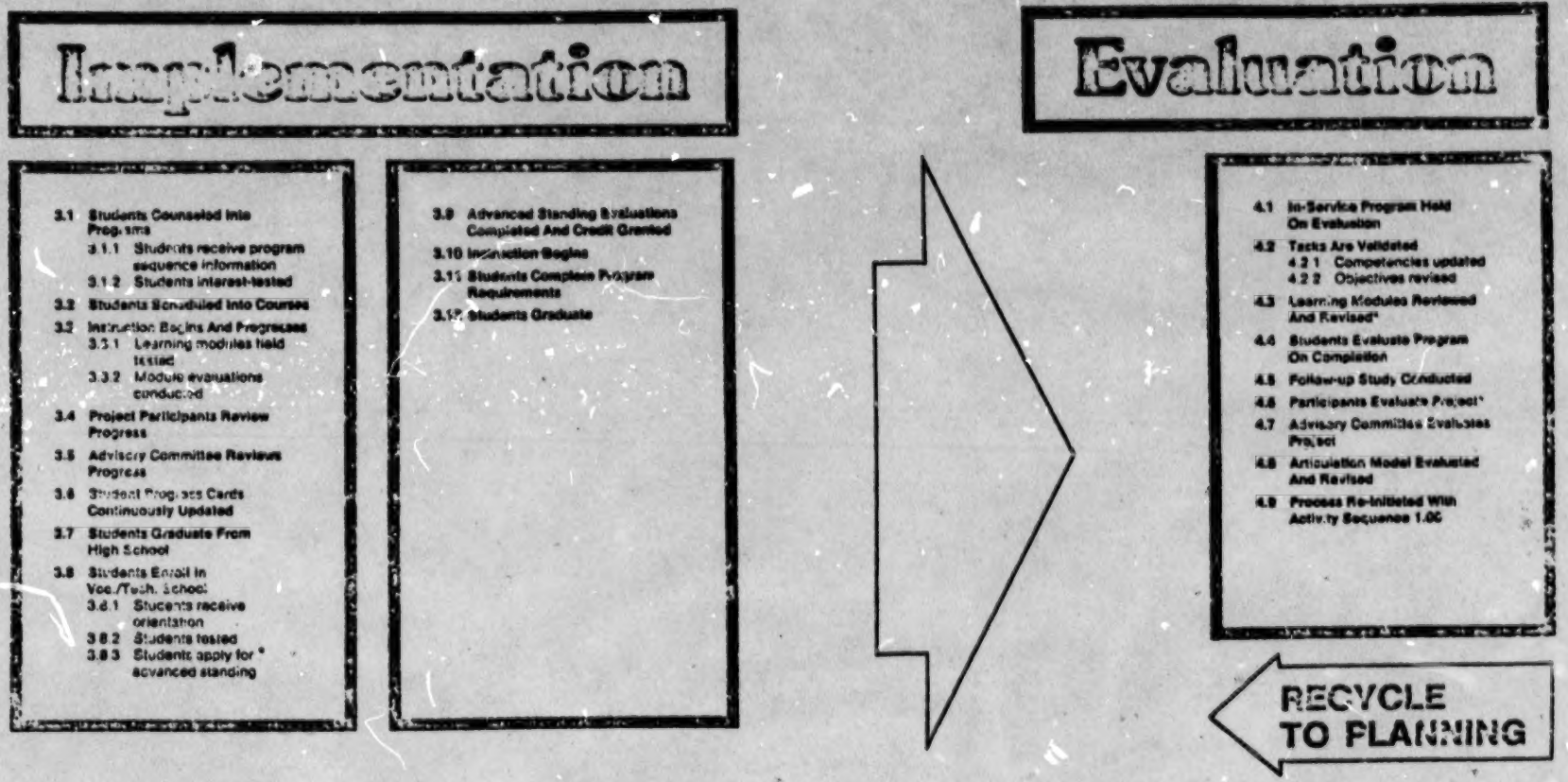
Development

- 2.1 First Workshop Session Held
  - 2.1.1 Participants receive orientation*
  - 2.1.2 In-service training provided in competency-based instruction
- 2.2 Program Area Researched
  - 2.2.1 V-Tecs materials screened
  - 2.2.2 ERIC Research conducted
  - 2.2.3 Other task inventories studied
  - 2.2.4 Existing task analysis materials adopted (if appropriate)
- 2.3 Task Analysis Conducted
  - 2.3.1 Task inventory plan developed
  - 2.3.2 Instrument selected or developed
  - 2.3.3 Job descriptions written
  - 2.3.4 Sample population selected
  - 2.3.5 Survey assignments made
  - 2.3.6 Task survey conducted
  - 2.3.7 Task survey data tabulated
  - 2.3.8 Preliminary analysis written*

- 2.4 Data Reviewed By Advisory Committee
- 2.5 Instructional Content Defined
  - 2.5.1 Tasks selected and agreed upon
  - 2.5.2 Tasks converted to competencies
  - 2.5.3 Specific objectives written
- 2.6 In-Service Program Held On Developing Instructional Materials
- 2.7 Units Of Study Defined
  - 2.7.1 Units determined
  - 2.7.2 Units sequenced
- 2.8 Progress Reviewed By Advisory Committee
- 2.9 Learning Modules Prepared*
  - 2.9.1 Alternate learning activities designed
  - 2.9.2 Resources identified
  - 2.9.3 Pre-test developed
  - 2.9.4 Criterion exam written
- 2.10 Evaluation Design Completed
- 2.11 Management System Completed
  - 2.11.1 Student progress card* prepared
  - 2.11.2 Filing system organized

FROM EVALUATION

Note: Asterisked items have related materials enclosed in Appendix. These materials are identified by the same reference number as the asterisked items.


Implementation
3.1 Students Counseled Into Programs
3.1.1 Students receive program sequence information
3.1.2 Students interest-tested
3.2 Students Scheduled Into Courses
3.3 Instruction Begins And Progresses
3.3.1 Learning modules field tested
3.3.2 Module evaluations conducted
3.4 Project Participants Review Progress
3.5 Advisory Committee Reviews Progress
3.6 Student Progress Cards Continuously Updated
3.7 Students Graduate From High School
3.8 Students Enroll In Voc./Tech. School
3.8.1 Students receive orientation
3.8.2 Students tested
3.8.3 Students apply for advanced standing
3.9 Advanced Standing Evaluations Completed And Credit Granted
3.10 Instruction Begins
3.11 Students Complete Program Requirements
3.12 Students Graduate
Evaluation
4.1 In-Service Program Held On Evaluation
4.2 Tasks Are Validated
4.2.1 Competencies updated
4.2.2 Objectives revised
4.3 Learning Modules Reviewed And Revised*
4.4 Students Evaluate Program On Completion
4.5 Follow-up Study Conducted
4.6 Participants Evaluate Project*
4.7 Advisory Committee Evaluates Project
4.8 Articulation Model Evaluated And Revised
4.9 Process Re-Initiated With Activity Sequence 1.00
RECYCLE TO PLANNING

PROJECT EVALUATION FORM APENDIX B Project Number _____

VE-VE-28 4/77

Project Title _____

A. Acceptability Criteria

I. Basic Acceptance Criteria - What makes the project acceptable. Provide narrative for each criterion to justify the rating. (Circle the appropriate rating)

1 - The project meets the intent of VEA sex discrimination elimination/equal access identified in the VEA Act _____	Acceptable	Non-Acceptable	N/A
2 - Project has an adequate supervision and evaluation plan _____	Acceptable	Non-Acceptable	N/A
3 - Communicates the District commitment to conduct and continue the effort _____	Acceptable	Non-Acceptable	N/A
4 - Budget is realistic and reasonable	Acceptable	Non-Acceptable	N/A

II. Relative Acceptance Criteria - How does the project rank among the acceptable projects? Provide narrative for each criterion to justify the rating. (Circle the appropriate ratin

The Project:

1 - Meets intent of the federal legislation.	0-2	3-4	5-6	7-8	9-10	N/A
	Poor	Fair	Good	Excellent	Superior	N/A
2 - Includes state/local Advisory Committee input	0-2	3-4	5-6	7-8	9-10	N/A
	Poor	Fair	Good	Excellent	Superior	N/A
3 - Meets intent of state plan, mission, needs, priorities	0-2	3-4	5-6	7-8	9-10	N/A
	Poor	Fair	Good	Excellent	Superior	N/A
4 - Is consistent with accepted district plan, needs and priorities	0-2	3-4	5-6	7-8	9-10	N/A
	Poor	Fair	Good	Excellent	Superior	N/A
5 - Is complete, has measurable objectives soundly designed and organized in its general approach to solving the need _____	0-2	3-4	5-6	7-8	9-10	N/A
	Poor	Fair	Good	Excellent	Superior	N/A

6 - Total Points _____ of _____. 7 - % of maximum score _____

Signature of Reviewer: _____ Date: _____

B. Merit Criteria - What makes it a meritorious project? (Use for the 25% non-allocated funds.) Provide narrative for each criterion to justify the rating given.

How does the project relate to:	(circle one)					
1 - A program which meets new and emerging manpower needs	0	10	20	30	40	N/A
2 - The expansion or improvement of an existing program	0	5	10	15	20	N/A
3 - A higher than usual cost program	0	5	10	15	20	N/A
4 - An innovation or exemplary activity	0	5	10	15	20	N/A
5 - Other Specified Pertinent Criteria	0	5	10	15	20	N/A

6 - Total Points _____ of _____ 7 - Percentage of Maximum Score _____

C. 1. Total Points - Section A.II and Section B _____ of _____

2. Percentage of Maximum Score $\frac{\text{Project Score}}{\text{Project Maximum Potential Score}} \times 100 =$ [ ]

Signature of Reviewer _____ Date _____

APPENDIX C

SCHEMA OF SUGGESTED VTAE DISTRICT CURRICULUM ARTICULATION PLAN

MARKETING

COURSES TAUGHT WITHIN YOUR SCHOOL	SCHOOLS				
	A	B	C	ETC.	VTAE
1. SALES	X	X	X	X	X
2. RETAILING	X				X
3. MARKETING		X			X
4. CREDIT	X		X		
5. BUSINESS ENGLISH			X		X
6. ACCOUNTING		X		X	X
7. RESUME WRITING	X				X
8. DATA PROCESSING	X				
9. GENERAL BUSINESS	X	X	X	X	X
10. INSURANCE	X				X
11. REAL ESTATE		X	X	X	
12. FASHION MERCHANDISING	X	X	X	X	

APPENDIX D

V-TECS PROJECT STATUS AND PRODUCT AVAILABILITY REPORT

10/01/77

PREPARED FOR: SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS

THE V-TECS PROJECT STATUS AND PRODUCT AVAILABILITY REPORT IS UPDATED AND PRODUCED AT THE END OF EACH MONTH FOR TECHNICAL COORDINATORS AND BOARD MEMBERS. A COPY WILL BE MAILED TO EACH STATE DIRECTOR BI-MONTHLY. TECHNICAL COORDINATORS, PLEASE NOTE THE LAST PAGE OF THIS REPORT IS FOR PRODUCT STATUS INPUT AND SHOULD BE RETURNED BY THE 10TH OF EACH MONTH TO DR. T. HINSON, V-TECS. ALSO, IF THERE ARE ANY QUESTIONS CONCERNING ANY DATES OR PRODUCT STATUS ON THIS REPORT, PLEASE CALL 404-875-8017.

THIS REPORT DIVIDES PROJECTS STATUS (CATALOGS) INTO THREE GROUPS: 1) FINALS CATALOGS AVAILABLE AT V-TECS, 2) CATALOGS WITHOUT A MEMORANDUM OF AGREEMENT, AND 3) CATALOGS UNDER DEVELOPMENT

TECHNICAL COORDINATORS, COST SHEETS ARE REQUIRED ON THE FOLLOWING PRODUCTS FOR APPROVAL:

1) DOMAIN REPORT
2) ALL DATA CARDS
3) FIELD REVIEW CATALOGS
4) FINAL CATALOGS

FINAL CATALOGS AVAILABLE AT V-TECS

PROJECT NUMBER	PROJECT DESCRIPTION
ALABAMA	
1112	RADIO/TV REPAIRMAN
1120	NURSERYMAN
1122	AUTO PARTS CLERK
1123	LIC PRACTICAL NURSE
1124	ALTERATIONIST
1125	COSMETOLOGIST
DELAWARE	
FLORIDA	
1221	AUTO BODY
1222	TURF MANAGEMENT
1223	AUTO MECHANIC
1236	WELDER
1237	FLORICULTURE
1238	HOSPITAL WARD CLERK
1239	TAX COLLECTOR
1299	HOUSING MANAGER
GEORGIA	
1331	DATA PROCESSING
1332	MACHINE OPERATOR
1343	COMPUTER PROGRAMMER
1344	EMER MED TECHNICIAN
INDIANA	
KENTUCKY	
1441	DENTAL ASSISTANT
1442	TRACTOR MECHANIC
1443	CASHIER/CHECKER
1444	CARPENTER
1445	BANK TELLER
1446	CHILD CARE
1454	LEGAL SECRETARY
1456	DRAPERY WORKER
LOUISIANA	
2095	SHIP OPERATIONS
MARYLAND	

FINAL CATALOGS AVAILABLE AT V-TECS

PROJECT NUMBER	PROJECT DESCRIPTION
MICHIGAN	
MISSISSIPPI	
1551	PLUMBING
1552	LANDSCAPING
1563	COTTON GIN OPERATOR
PENNSYLVANIA	
SOUTH CAROLINA	
2132	TEXTILE PRODUCTION
2133	SMALL ENGINE REPAIR
TENNESSEE	
VIRGINIA	
1771	SECRETARY
1772	FOOD SERVICE
1788	TIMBER HARVESTING
1789	NURSE AIDE
WEST VIRGINIA	
WISCONSIN	

ASSIGNED CATALOGS WITHOUT A MEMORANDUM OF AGREEMENT PROCESSED

PROJECT NUMBER	PROJECT DESCRIPTION
ALABAMA	
1133	HOMEMAKER
DELAWARE	
FLORIDA	
1244	HOMEMAKER
1252	COMMERCIAL ART
GEORGIA	
1361	MEDICAL OFFICE ASST
1362	TWO-WAY RADIO TECH
INDIANA	
3341	MECHANICAL DRAFTING
3342	ACCOUNTING
KENTUCKY	
1462	HOMEMAKER
LOUISIANA	
2012	OILFIELD TECHNICIAN
MARYLAND	
3231	LEAD SECRETARY
3232	WORD PROCESSING
MICHIGAN	
3451	RETAIL SALES
MISSISSIPPI	
1572	HOMEMAKER
PENNSYLVANIA	
SOUTH CAROLINA	
2144	HOMEMAKER
2151	TEXTILE WORKER
TENNESSEE	
3113	HOMEMAKER
VIRGINIA	
WEST VIRGINIA	
WISCONSIN	

CODE KEY:
DATES ARE PROJECTIONS OF ARRIVAL AT V-TECS
D = DRAFT COPY
F = FINAL COPY
X = APPROVED AND AVAILABLE AT V-TECS

CATALOGS UNDER DEVELOPMENT

PROJECT NUMBER	MEMORANDUM OF AGREEMENT	STATE OF ART	POP. REPORT	OCCUPATIONAL INVENTORY	DOMAIN REPORT	OCCUPATIONAL DATA	PRE WRITING TEAM REPORT	FIELD REVIEW CATALOG	FINAL CATALOG
ALABAMA									
1111 AIR CONDITIONING	12/05/3								
1121 BOOKKEEPER	11/11/4	X	X	X	X	X	X	10/77	
1126 BRICKLAYER	11/07/4	X	X	X	X	X	X	X	10/77
1132 CATTLE RANCHER	10/05/6	X							
DELAWARE									
3001 SHEET METAL	10/20/5	X	X	X	X	X	X	D	
3002 WAREHOUSING	11/20/5	X	X	X	X	X	X	D	
FLORIDA									
1241 CUSTOM DRESSMAKER	07/19/6	X	X	X	X	X	D	10/77	
1242 MEDICAL LAB ASSIST	08/14/6	X	X	X	X	X	X	12/77	
1251 FARM EQUIP MECH	08/30/7								
GEORGIA									
1355 ELECTRONIC TECH	04/01/6	X							
1356 APPLIANCE REPAIR	02/02/6	X		08/77					
INDIANA									
3331 AGRIMECHANICAL	11/15/6	X	X	X	F				
3332 DRAFTING	12/15/6	X	X	X	X				
KENTUCKY									
1453 ELECTRICIAN	12/01/4	X		D	10/77				
1455 MEDICAL ASSISTANT	11/01/4	X	X	X	X	X	X	X	10/77
1457 FLORAL SALES	02/15/5	X	X	X	X	X	X	10/77	
1458 AG PARTS CLERK	12/01/4	X	X	X	X	X	X	D	11/77
1461 APPLIANCE SALES	02/12/6	10/77							

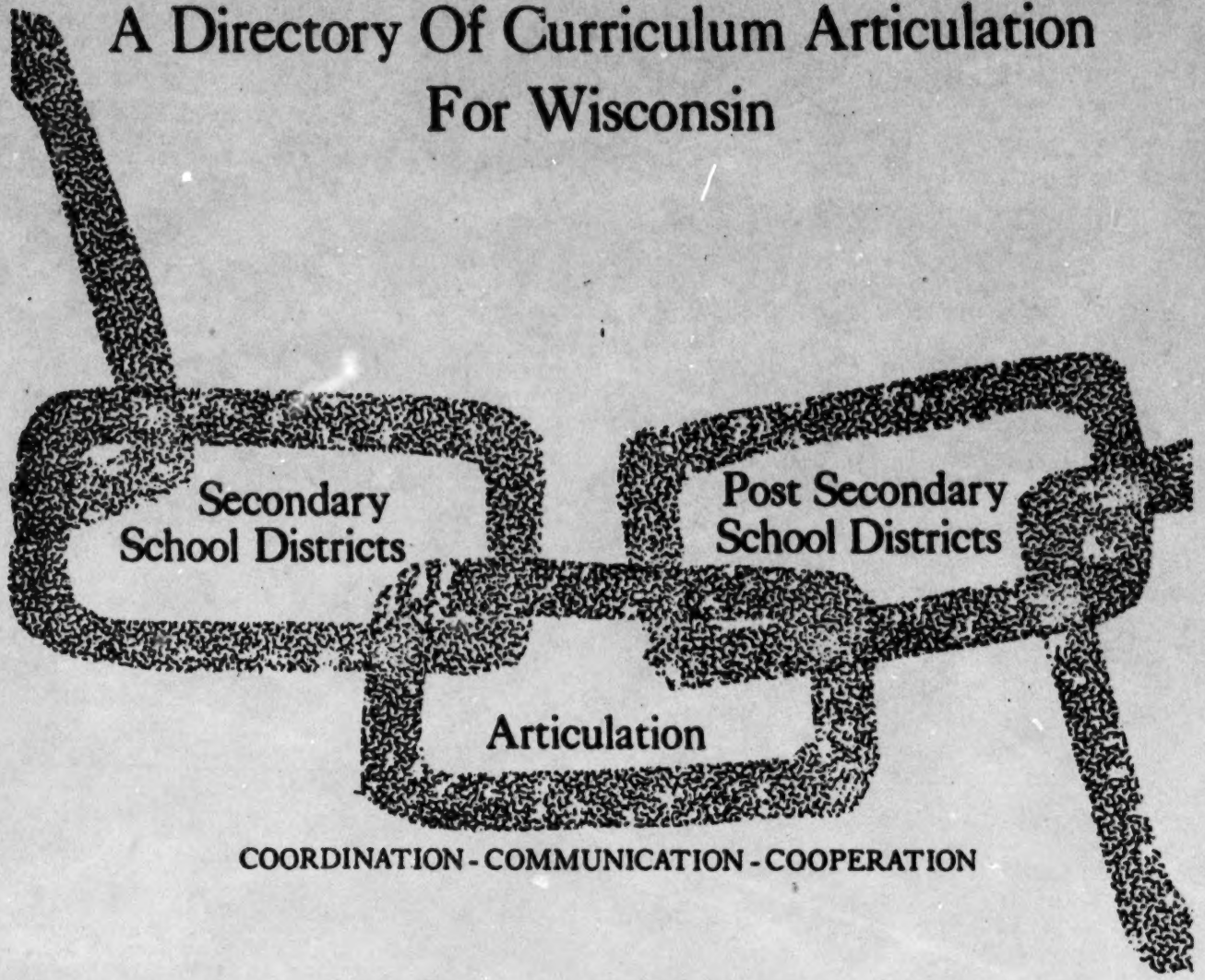
CATALOGS UNDER DEVELOPMENT

PROJECT NUMBER	MEMORANDUM OF AGREEMENT	STATE OF ART	POP. REPORT	OCCUPATIONAL INVENTORY	DOMAIN REPORT	OCCUPATIONAL DATA	PRE WRITING TEAM REPORT	FIELD REVIEW CATALOG	FINAL CATALOG
LOUISIANA									
2096 HOTEL/MOTEL MGMT	02/28/5	X	X	X					
2013 WATER/WASTE WATER	07/25/7	D							
2014 PATROLMAN	07/25/7	D	D						
2015 DIESEL MECHANIC	02/28/7	X	X	D					
2021 RETAIL CREDIT	01/14/7	D							
2022 BUTCHER	01/14/7	X	X	X	X	X	D		
2023 DOMESTIC SERVICE	01/14/7	X	X	X	X	X			
2024 BANKING CLERK	01/14/7	X							
MARYLAND									
3221 EXEC SECRETARY	07/01/6	X	X	X	X	X	X		
3222 WORD PROCESSING	07/01/6	X	X	X	X	X	X		
MICHIGAN									
3441 SECURITY GUARD	05/07/6	X	X	X	X				
3442 PRINTING	05/07/6	X	X	X	X	X	X		
MISSISSIPPI									
1564 INDUSTRIAL SEWING	09/17/4	X	X	X	X	X	X	X	D
1571 HEALTH CARE WORKER	07/16/4	X	X	X	X	X	X	D	
PENNSYLVANIA									
SOUTH CAROLINA									
2145 BUSINESS MACH REPAIR	03/01/8	X		D					
2152 AG PRODUCTION	05/20/7	D							
TENNESSEE									
3111 HOUSE ELECTRICIAN	07/1/7	10/77							
3112 CABINETMAKER	06/17/7	D							
VIRGINIA									
1790 FARM EQUIP OPERATOR	03/01/6	X	X	X	X	X	D	10/77	

CATALOGS UNDER DEVELOPMENT

PROJECT NUMBER	MEMORANDUM OF AGREEMENT	STATE OF ART	POP. REPORT	OCCUPATIONAL INVENTORY	DOMAIN REPORT	OCCUPATIONAL DATA	PRE WRITING TEAM REPORT	FIELD REVIEW CATALOG	FINAL CATALOG
1791 VETERINARY ASSISTANT	01/03/7	X	X	D	10/77				
1704 SURGICAL TECHNICIAN	8/22/7								
WEST VIRGINIA									
4111 CUSTODIAL SERVICE	9/19/7	X	X	X	D				
4112 MINE MACHINE OPER.	9/19/7	D							
4113 FIRE FIGHTERS	9/02/7								
WISCONSIN									
4001 INDUS. MAINT. MECH.	03/11/7	X							
4002 FARM MANAGEMENT.	03/11/7	X							

A Directory Of Curriculum Articulation For Wisconsin



COORDINATION - COMMUNICATION - COOPERATION

WISCONSIN BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION

MAY, 1977

ARTICULATION PROJECTS CURRENTLY UNDER
DEVELOPMENT AND FUNDED THROUGH
THE WBVTAE FOR 1977

Food Service Articulation To develop articulated courses and proficiency exams based on identified competencies and the state guide.	#01.044.151.187 District One Technical Institute Eau Claire Dr. William Boyle and Robert Johnson
Articulation in Basic Communications	District One Technical Institute, Eau Claire Michael Stacy
Competency Based Articulation To develop, implement and verify a curriculum articulation model which will articulate the curriculum between high schools and the VTAE post-secondary schools.	#06.158.151.187 Gateway Technical Institute, Kenosha Mr. Don Hogan
Curriculum Articulation To conduct a series of teacher-to-teacher seminars to determine competencies expected to be taught at the secondary and post-secondary levels in selected programs.	#09.039.151.187 MATC - Milwaukee Mr. Bernard Greeson
Articulation of Communication Skills To improve articulation through review of task analysis inventories and development of a guide.	#11.010.151.187 Lakeshore Technical Institute, Cleveland Mr. Ed Falck and Marvin Schrader
Improving Articulation - II To develop occupational training ladders using the competency based instruction approach in selected program areas.	#12.278.151.187 Fox Valley Technical Institute, Appleton Mr. Stan Spanbauer
Articulation Model To develop, implement and verify a curriculum articulation model through a series of in-service workshops.	#14.009.151.187 Mid-State Technical Institute, Wisconsin Rapids Dr. Max Farning
Articulation of Vocational Education To field test competencies developed through the DACUM method and improve articulation in two additional curriculum areas.	#17.059.151.187 Wisconsin Indianhead District Shell Lake Mr. Richard Roder and Mr. Dan Wagner

Articulation in Distributive Education Marketing Graphics To identify the basic competencies and the level of performance of those competencies which are developed at the high schools in relationship to NWTI's Marketing Graphics Program.	#13.050.151.187 Northeast Wisconsin VTAE District Green Bay Mr. Dan Bressler, Mr. Wayne Ellinger and Dr. John Howlett
Articulation Model To utilize V-TECS in bringing together the secondary and post-secondary personnel in developing and promoting open communication for the purposes of advanced standing in the business education area.	#02.022.151.87 Western Wisconsin Technical Institute La Crosse Dr. Dick Rodgers
Articulation of Farm Operator To further investigate the curriculum used by high schools in their agriculture related courses as it relates to the Southwest VTAE ag program.	#03.022.151.187 Southwest VTAE District, Fennimore Mr. John Stroebel and Mr. Robert Borremans
Articulation of Communication Skills To further investigate the curriculums used by area high schools within the communications area.	#03.022.151.187 Southwest VTAE District, Fennimore Mr. Robert Borremans and John Lalor

CURRICULUM ARTICULATION 1977

Curriculum Articulation - 4 areas
Planning sessions for this coming year in the areas of: agriculture, office occupations, drafting and health occupations.

#12-278-151-18D
Fox Valley Technical Institute
Appleton
Mr. Stanley Spanbauer

Articulation - Distributive Education
To develop competency tests for the usage of CBI through the V-TECS model, incorporate advance standing procedures and to bring together the secondary and post-secondary instructors.

#02-022-151-187
Western Wisconsin VTAE District
La Crosse
Dr. Richard Rogers

Articulation - Office Occupations
To update the inventory of tasks analysis and competencies, to promote good public relations between WCTI and the public schools and to develop a matrix of the current standing of office occupations.

#08-023-151-18B
Waukesha County VTAE District
Waukesha
Mr. James Eigenfeld

Food Service Articulation
To develop articulated courses and proficiency exams based on identified competencies and the state guide.

#01-044-151-187
District One Technical Institute
Eau Claire
Dr. William Boyle and Robert Johnson

Articulation in Basic Communications

District One Technical Institute
Eau Claire
Michael Stacy

Competency Based Articulation
To develop, implement and verify a curriculum articulation model which will articulate the curriculum between high schools and the VTAE post-secondary schools.

#06-150-151-187
Gateway Technical Institute
Kenosha
Mr. Don Hogan

Curriculum Articulation
To conduct a series of teacher-to-teacher seminars to determine competencies expected to be taught at the secondary and post-secondary levels in selected programs.

#09-039-151-187
MATC - Milwaukee
Mr. Bernard Greeson

Articulation of Communication Skills
To improve articulation through review of task analysis inventories and development of a guide.

#11-010-151-187
Lakeshore Technical Institute
Cleveland
Mr. Ed Falck and Marvin Schrader

Improving Articulation - II
To develop occupational training ladders using the competency based instruction approach in selected program areas.

#12-278-151-187
Fox Valley Technical Institute
Appleton
Mr. Stan Spanbauer

Articulation Model
To develop, implement and verify a curriculum articulation model through a series of in-service workshops.

#14-009-151-187
Mid-State Technical Institute
Wisconsin Rapids
Dr. Max Farning

Articulation of Vocational Education
To field test competencies developed through the DACUM method and improve articulation in two additional curriculum areas.

#17-059-151-187
Wisconsin Indianhead District
Shell Lake
Mr. Richard Roder and Mr. Dan Wagner

Articulation in Distributive Education Marketing Graphics
To identify the basic competencies and the level of performance of those competencies which are developed at the high schools in relationship to NWTI's Marketing Graphics Program.

#13-050-151-187
Northeast Wisconsin VTAE District
Green Bay
Mr. Dan Bressler, Mr. Wayne Ellinger and Dr. John Rowlett

Articulation Model
To utilize V-TECS in bringing together the secondary and post-secondary personnel in developing and promoting open communication for the purposes of advanced standing in the business education area.

#02-022-151-187
Western Wisconsin Technical Institute
La Crosse
Dr. Dick Rodgers

Articulation of Farm Operator
To further investigate the curriculum used by high schools in their agriculture related courses as it relates to the Southwest VTAE ag program.

#03-021-151-137
Southwest VTAE District
Fennimore
Mr. John Strocbel and
Mr. Robert Borremans

Articulation of Communication Skills
To further investigate the curriculums used by area high schools within the communications area.

#03-022-151-187
Southwest VTAE District
Fennimore
Mr. Robert Borremans and
John Lalor

JF/amh
7/25/77

REPORTS RELATED TO CURRICULUM ARTICULATION (COMPLETED)

Curriculum Initiation in Wisconsin VTAE Schools	Wisconsin Vocational Studies Center, Thomas A. Barocci, Reference #W-427
What Vocational Education Teachers Should Know About Individualizing Instruction. (1971)	Wisconsin Vocational Studies Center, David Bjorkquist, Reference #W-1222
Procedures for Constructing and Using Task Inventories. (1973)	Wisconsin Vocational Studies Center, William Melching and Sidney Borcher, Reference #W-1615
Curriculum Development and Evaluation. (1971)	Journal of Educational Research Hulda Grobman, Reference #W-757
Do's and Don't's of Individualized Instruction	Waukesha County Area VTAE District Jim Tegtmeyer, Reference #W-774
Is Articulation Possible? (1971)	AVA Journal, M. G. Linson, J. W. Wilson and M. G. Hunt, Reference #W-777
How to Build an Instructional Package. (1970)	UW - Stout, D. Igl Reference #W-1097
An Investigation of the Interaction of Learning Styles and Types of Learning Experiences in Vocational Education. (1973)	Center VTAE - UW - Stout J. Banks, Reference #W-1536
An Investigation of the Interaction of Learning Styles and Types of Learning Experiences in Vocational Education. (1973)	Fox Valley Technical Institute, Appleton A. Spanbauer, V. Oen
Guide to Structure and Articulation of Occupational Education Programs	Superintendent of Public Instruction L. P. Minear, Reference #328
Articulation of Vocational Education Planning with Comprehensive State Planning. (1971)	3rd Annual National Leadership Development Seminar for State Directors of Vocational Education D. L. Ward and E. M. Kazarian Reference #W-847
From High School to Community College - A Vital Link in the Articulation Process. (1972)	Junior College Research Review, Reference #W-1142
Articulation of Occupational Orientation, Education, and Placement in Private and Public Elementary, Secondary and Post-Secondary Schools. (Evaluation) (1973)	Project #1-361-0166. C. Gilbertson, O. Nelson, and H. Halfin and District 11, Reference #W-1494

Educational Relationships Between Intermediate Units and Area Vocational Technical Schools in Pennsylvania. (1974)	Penn State University Seymour T. Brantner and C. P. Wichowski, Reference #W-1654
Articulation Study Report. (1973)	Department of Education, Division of Community Colleges, Florida Reference #W-1680
Student Articulation Between Secondary and Post-Secondary Education. (1974)	Texas A and M University, B. R. McKinnerney, R. Thomas, and H. R. Todd, Reference #W-1752
Articulation of Occupational Orientation, Ed. and Placement in Private and Public Elementary, Secondary and Post-Secondary Schools. (1975)	Lakeshore VTAE, District 11, C. Bingner, Reference #W-2051
Articulation of Vocational Education Curriculum between Secondary and Post-Secondary Levels in Wisconsin. (1975)	UW - Stout, R. M. Mandy and C. E. Stapleton, Reference #W-2071
Articulation. (1976)	National Advisory Council on Vocational Education, Reference #W-2154
Occupational Food Service Education. A Model for the Articulation of Secondary through Post-Secondary Food Service Training Programs.	Southwest VTAE - Fennimore Wisconsin DPI and Wisconsin WBVTAE D. Barton and C. Brainerd, Reference #W-2165
VTAE Articulation. (1976)	Fox Valley VTAE, Appleton, Wisconsin Reference #W-2225
Secondary - Post-Secondary Curriculum Articulation Project for Vocational, Technical Education in Minnesota. (1976)	University of Minnesota, Dr. L. J. Burger, Reference #2238
Articulation General Secretarial Composite. (1976)	Fox Valley VTAE, Appleton, Wisconsin Reference #W-2253
Curriculum Articulation for Trade and Industrial Vocational Education Auto Mechanics, Machine Tool, Welding. (1976)	Mid-State VTAE, Dr. Max Farning Reference #W-2254
The Need for a Course and Career Planning at Western Wisconsin Tech. (1970)	Western Wisconsin VTAE, by Harold Motschenbacher, Reference #W-663
Status of Industrial Education in the Public Secondary School of Wisconsin. (1972)	Wisconsin DPI Studies - UW - Stout By R. Gebhardt and O. Nelson Reference #W-1523
A Comparison of Secondary and Post-Secondary In-School Skill Training for Two Allied Health Occupations. (1976)	Wisconsin DPI Studies, By J. Johnston and Dr. H. Sampson, Reference #W-2248
Planning for Competency Based Teacher Education. (1976)	Research Coordinating Unit of WBVTAE, Reference #W-2245

A Study of the Functions and Job Entry Skills of the 1968 Dental Assistant Graduates at Kenosha VTAE.	Kenosha VTAE #6, By R. W. Graf, Reference #W-207
A Study of the Appropriateness and Effectiveness of the Mechanical Design Technology Program at Kenosha VTAE	Kenosha VTAE #6, by H. H. Braun Reference #W-311
An Assessment of Current and Projected Individualized Instruction in Business and Marketing Courses Provided by the Districts of WBVTAE.	UW - Madison, (1971) Dr. H. E. Samson, Reference #W-791
Function - Task - Competency Approach to Curriculum Development in Vocational Education in Agriculture. (1974)	UW - Madison, By H. R. Matteson, W. T. Bjoraker and R. A. Jensen, Reference #W-1766
UW- VTAE System Articulation and Coordination. UWS - VTAE Information Report. (1975)	UW - Stout and VTAE Board, Dr. S. Ansell, Reference #W-1911
Wisconsin Articulated Food Service Guide: (3 parts). (1976)	UW - Stout, Center for VTAE, By O. Nelson and A. Prichard, Reference #W-2198
A Task Analysis of the Clothing Service Occupations in the State of Wisconsin	UW - Stout, Center for VTAE by S. Mazejy, Reference #W-2210
Evaluation of Civil Structural Curriculum in Terms of Ratings by Employers and Technicians. (1974)	District #1, Eau Claire VTAE, By L. Larson and R. Loer, Reference #W-1823
Determining Performance Levels of Competencies for Job Entry of Data Processing Programmers. (1976)	District #1, Eau Claire VTAE, By J. N. Kettner, Reference #W-2220
Needed Abilities, An Analysis for the Dental Assisting Program.	Western Wisconsin VTAE, Reference #W-1295
An Examination to Determine the English Competencies Required by Secretaries in the Administrative, Legal and Medical Areas with a Synthesis into a Core of Common Competencies to be Used in Forming a Basis for an English Curriculum. (1973)	Western Wisconsin VTAE, by D. M. Radloff, Reference #W-1466
Development and Evaluation of Curriculum and Media to Train Part-time Fire Service Instructors in Rural Areas	Western Wisconsin VTAE, By F. E. Kloss, Reference #W-1588
Identifying Competencies in the Food Service Industry as Related to Curriculum Articulation. (1973)	Southwest Wisconsin VTAE, Fennimore, by L. Wagner, C. Brainerd, D. Wagner, and R. Anderson, Reference #W-1496

Articulation of General Education with Occupational Competencies. (1974)	Southwest Wisconsin VTAE, Fennimore, By W. Wolfe, J. Almquist, R. Duffy, D. Wagner, B. Osterholz, Reference #W-1747
Assessment and Determination of Basic Competencies Necessary for Utility Operators Utilizing Ground Water Supplies. (1975)	Southwest VTAE, By G. L. Stegeman, Reference #W-1953
Determination of Required Skills Necessary for Job Entry Level of Employment in the Auto Body Trade. (1975)	Southwest Wisconsin VTAE, By J. Schindler, Reference #W-2014
Guide for Integrating Environmental Education Concepts into Elementary, Secondary and Post-Secondary VTAE. (1973)	WBVTAE, Moraine Park VTAE, UW - Center at Fond du Lac, and USOE, Reference #W-1521
Task Analysis - Optometric Assistant. (1974)	Lakeshore Technical Institute, By M. Schrader, Reference #W-1826
Job Skills Needed in the Area of Plastic Lens Fabrication. (1976)	Lakeshore Technical Institute, By Marvin Schrader and Richard Wohlever, Reference #W-2176
Metal Fabrication and Welding Task Analysis (1974) Questionnaire	Fox Valley VTAE, Reference #W-1756
Automotive Task Analysis Questionnaire Tabulation. (1974)	Fox Valley VTAE, Reference #W-1824
Developing Competencies for the Communication Skills Area in VTAE - Post-Secondary. (1975)	Mid-State VTAE, By Dr. Max Farning, Elaine Boyce, and Ralph Mahnke, Reference #W-1952
Determining Performance Levels of Competencies for Job Entry into the Medical Occupation. (1976)	Mid-State VTAE, By Dr. Max Farning and Mildred Lange, Reference #W-2255
Evaluation of Secondary Math Curriculums in District 15 as They Relate to the Math Background Requirements of Post-Secondary VTAE Students. (1971)	North Central VTAE, By L. Kaffine Reference #W-939
Syllabus and Curriculum Development for Typing III, Utilizing an Individualized Instructional Approach. (1973)	North Central VTAE, By B. Dickerson, Reference #W-1782
Secondary to Post-Secondary Curriculum Articulation in Basic Communication - An All Program Development	Eau Claire VTAE, By Mike Stacy and Committee, Reference #W-2265

INSTRUCTIONAL MATERIALS HELPFUL IN DEVELOPING ARTICULATION

W-26 State Agencies and Teacher Education Institutions Materials Development Activities in Distributive Education
By J. C. Levendowski

W-665 The Production and Validation of Educational Systems Packages for Occupational Training of Depressed Area Students, Final Report.
By Don D. Bushnell

W-925 Vocational Instructional Materials for Agriculture
By Northwest Regional Educational Laboratory (Aug. 1971)

W-926 Vocational Instructional Materials for Distributive Education
By Northwest Regional Educational Laboratory (Aug. 1971)

W-927 Vocational Instructional Materials for Health Occupations Education
By Northwest Regional Educational Laboratory (Aug. 1971)

W-928 Vocational Instructional Materials for Home Economics
By Northwest Regional Educational Laboratory (Aug. 1971)

W-929 Vocational Instructional Materials for Office Occupations
By Northwest Regional Educational Laboratory (Aug. 1971)

W-931 Vocational Instructional Materials for Trade and Industrial Occupations
By Northwest Regional Educational Laboratory (Aug. 1971)

W-1559 Vocational Instructional Materials for Students with Special Needs. 1972
By Douglas C. Towne & Sydney Wallace of Northwest Regional Ed. Laboratory.

W-309 Survey of Auto Body Repair Mechanic Needs in the Northeast Wisconsin Area
By Northeast Wisconsin VTAE

W-1389 Summer Field Experience in Auto Mechanics
By J. Contney and B. Birchler, VTAE District 1 (1973)

W-2202 Task Analysis for Auto Body Electricity
By M. Schrader and L. Haller, Lakeshore VTAE

W-1615 Procedures for Constructing and Using Task Analysis Inventories (1973)
By W. H. Melching and S. D. Borcher (Research Series #91)

W-543 Maintenance Mechanics Curriculum Guide
By Wisconsin Canners and Freezers Association
WBVTAE, Moraine Park VTAE

W-1255 Evaluation of the New Wisconsin Home Economics Curriculum Guide for the Secondary Level
By one person from each institution, DPI and WBVTAE

W-1877 The 1974 Report on Health Occupations Education Programs in the Wisconsin System of VTAE.
By C. R. Schloemer, Ph.D. and M. Huffmaster, OTR, WBVTAE

W-2251 Research Priorities in Post-Secondary VTAE in Wisconsin for 1977-79. (1977)
By Research Coordinating Unit of Wisconsin VTAE

W-239 Successes and Failures Among Practice Nursing Trainees. (1969)
By M. E. Ketterling

W-348 Survey of Health Occupational Needs. (1969)
By Betty R. Zwicker, Fox Valley VTAE

W-508 An Effective English Program for the Technical School
By H. P. Erickson, (1967)

W-1129 An Assessment of Wisconsin Allied Health Occupations Educational Program
By Dr. M. E. Strong, (1971)

W-1508 A Survey of the Effectiveness of Current Vocational, Technical and Adult Education Training Programs for the Vocationally Handicapped in Wisconsin. (1971)
By WBVTAE

W-2211 Competency Assessment and Appropriate Placement of Food Service Students in the Wisconsin VTAE System
By B. Klecker, UW - Stout, Center for VTAE

W-2195 Marketing and Retail Sales Programs, Determining Performance Levels of Competencies for Job Entry. (1976)
By W. Hillmer and D. Wagner, Southwest Wisconsin VTAE

W-1390 An Evaluation Study of Auto Mechanics and Automotive Technology Programs and Curricula
By M. Seamans and M. Maiers, MATC - Madison, (1972) and J Rincke, UW - Stout

W-1764 Development of a Model for a Small Store Operation for Fashion Merchandising Students to be Utilized by Instructors in Fashion Merchandising Programs. (1974)
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W-1905 An Evaluative Study of Architectural Technology Programs and Curricula. (1974)
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W-1871 Development of Office Simulation Programs for Account Clerk and Clerk Typist Programs. (1974)
By Gateway VTAE

W-2218 Research of Curriculum Content Data Processing Program. (1976)
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W-1438 Partial Report of Survey and Analysis of Barbering in Wisconsin. (1975)
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W-1114 Evaluation of Electronics Curriculum in Terms of Employers' Rating of Job Performance of Former Students. (1972)
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W-1939 Vocationally Coordinated Curriculum for General Education
By Moraine Park VTAE, (1974)

W-1530 Health Occupations Core Curriculum Project
By Lakeshore Technical Institute, (1973)

W-2209 Task Analysis for Legal Assistant Program
By M. Schrader and John Knight, Lakeshore VTAE, (1976)

W-1518 Investigating the Interaction of Learning Styles and Types of Learning Experiences in VTAE. (1973)
By Dr. J. T. Oen, Fox Valley VTAE

W-617 A Pilot Study on the Use of Packaged Instruction as a Method of Teaching Apprenticeship - Related Mathematics
By R. J. Henning

W-1186 Analysis of Curriculum Changes, Developments and Trend in Mechanical Design Technology. (1971)
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W-1810 A Pilot Research Project to Determine the Feasibility of Developing Health Related Occupations Curricula at Nicolet College and Technical Institute. (1974)
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VOCATIONAL-TECHNICAL EDUCATIONAL CONSORTIUM OF STATES (V-TECS)
ANALYSIS OF D.O.T. JOB TITLES BY PROJECT
COMPLETED PROJECTS

PROJECT TITLE	INCLUDED D.O.T.'S
	D.O.T. Job Title
*Air Conditioning & Refrigeration	A/C Mechanic, Commercial Refrigeration Mechanic, Commercial A/C Mechanic, Auto Sys. A/C Mechanic, Domestic A/C Installer, Domestic
*Radio/TV	TV Service & Repairman TV Sales & Service Supervisor TV Installer Equipment Installer TV Sys. & Repairman App. Radio Repairman
*Nursery Prod.	Nurseryman Laborer, Nursery Nursery Worker
Bookkeeper	Bookkeeper I Bookkeeper II
*Auto Parts Clerk	Sales Person, Parts Parts Clerk Parts Counterman Counterman, Automobile Parts
*Licensed Practical Nurse	LPN
*Alterationist	Alterationist Tailor Seamstress, Alteration
*Cosmetology	Cosmetologist Manicurist Managing Cosmetologist
Masonry	Bricklayer, Construction Bricklayers, Brick & Tile
Travel Agent	D.O.T. To Be Assigned
Cattle Ranching	Cattle Rancher Farm Hand, Livestock Ranch Hand

*Available

Sheet Metal	Set-up Man, Sheet Metal Sheet Metal Fabricating Machine Operator Sheet Metal Worker Sheet Metal Lay-Out Man
Warehousing	Warehouseman Material Handler Stock Boy
*Auto Body	Auto Body Repairman Shop Estimator Auto Painter
*Turf Management	Turf-Grass Maintenance Sod Production Worker
*Auto Mechanics	Mechanic, Auto Auto Systems Mechanics Auto Mechanic Helper
*Combination Welding	Welder, Combination Welder, Combination, Apprentice Welder, Repair
*Floriculture	Flower Grower Flower Grower, Greenhouse
*Hospital Ward Clerk	Ward Clerk, Hospital Medical Record Clerk Hospital Admitting Clerk
*County Tax Collector	Tax Collectors, County Deputy/Assistant Tax Collector Tax Collector Specialist
*Housing Manager	Housing Manager Housing Management Aide Housing Maintenance Supervisor Social Service Supervisor Housing Occupancy Clerk
Dressmaking	D.O.T. To Be Assigned
Health Occupations	Medical Laboratory Assistant Laboratory Assistant, Plasma Draw-Off
Public Service Occupations	Building Inspector Building Inspector, Residential
Homemaker	D.O.T. To Be Assigned
*Data Processing	Digital Computer Operator Supervisor, Computer Operator
*Machine Shop	Machinist Machinist, Apprentice

*Programmer	Programmer, Business Chief Business Programmer
Emergency Medical	First Aid Attendant Ambulance Attendant Emergency Entrance Attendant
Electronic Technician	Electronic Technician Electronics Mechanic Field Engineer
Appliance Repair	Household Appliance Installation Man Household Appliance Repairman
Agrichemical	D.O.T. To Be Assigned
Drafting	D.O.T. To Be Assigned
*Dental Assistant	Dental Assistant
*Tractor Mechanic	Tractor Mechanic Tractor Mechanic Helper
*Cashier-Checker	Cashier-Checker
*Carpenter	Carpenter, Construction Carpenter, Rough Carpenter, Apprentice
*Bank Teller	Teller Head Teller
*Child Care	Child Care Attendant Child Care Assistant
Industrial Electrician	Electrician, Industrial Electrician, Industrial Helper Electrician, Industrial Repair
*Legal Secretary - Court Reporter	Legal Secretary Court Reporter
Medical Assistant	Medical Assistant, General Medical Assistant, Administrative Medical Assistant, Clinical
*Home Furnishings Worker	Drapery Estimator Drapery Seamstress Drapery Worker
Floral Sales	Floral Designer Salesperson, Flowers
Agriculture Parts Clerk	Agriculture Equipment Parts Man Agriculture Equipment Parts Clerk

Appliance Sales	Sales Person, TV and Appliance Sales Person, Hi-Fi Sales Person, Gas or Electrical Appliance
Ship Operations	Master, Ship Tug Boat and Ship Mate Able Seaman Marine Engineer Cook, Ship
Hotel/Motel Management	Manager, Hotel Manager, Motel Manager, Front Office Desk Clerk Bell Captain
Petroleum Technician	D.O.T. To Be Assigned
Oilfield Technician	D.O.T. To Be Assigned
Water Operator	Water Treatment Plant Operator Sewage Plant Operator Water/Waste Water Operator
Police Operator	Patrolman
Diesel Mechanic	D.O.T. To Be Assigned
Executive Secretary	D.O.T. To Be Assigned
Word Processing	D.O.T. To Be Assigned
Law Enforcement	Security Guard Watchman Special Policeman
Printing Press	Compositor Offset-Duplicating Machine Operator Finisher Camera Copy Offset/Pressman
*Plumbing	Plumber, Construction Plumber, Maintenance Plumber, Apprentice
*Gardening/Groundskeeper	Groundskeeper Landscape Gardener
*Cotton Gin	Ginner
Industrial Sewing	Foreman, Sewing Room Sewing Machine Operator Regular Sewing Machine Operator Special Equipment Sewing Machine Operator All Around

Rural Health Worker	Rural Health Worker Rural Health Trainee Family Health Worker Nursing Home Worker
*Textile Production	Loom Fixer Overseer Loom Fixer Loom Changer Looper Fixer Machine Repairman
*Small Engine Repair	Engine Repairman Power Saw Mechanic Lawnmower Engine Repairman Outboard Motor Mechanic
Home Manager	D.O.T To Be Assigned
Business Machine Repairman	Office Machine Serviceman Office Machine Serviceman Foreman Office Machine Serviceman Apprentice
House Electrician	D.O.T. To Be Assigned
Cabinet Maker	D.O.T. To Be Assigned
Homemaker	D.O.T. To Be Assigned
*Secretarial Science	Secretary Stenographer Typist Clerk-Typist
*Food Management	Head Cook Cook Cook, Helper
*Timber Harvesting	Woods Laborer Logging Contractor Logging Foreman
*Nursing Assistant	Nurse Aide Orderly
Farm Equipment Operator	D.O.T. To Be Assigned

*Available

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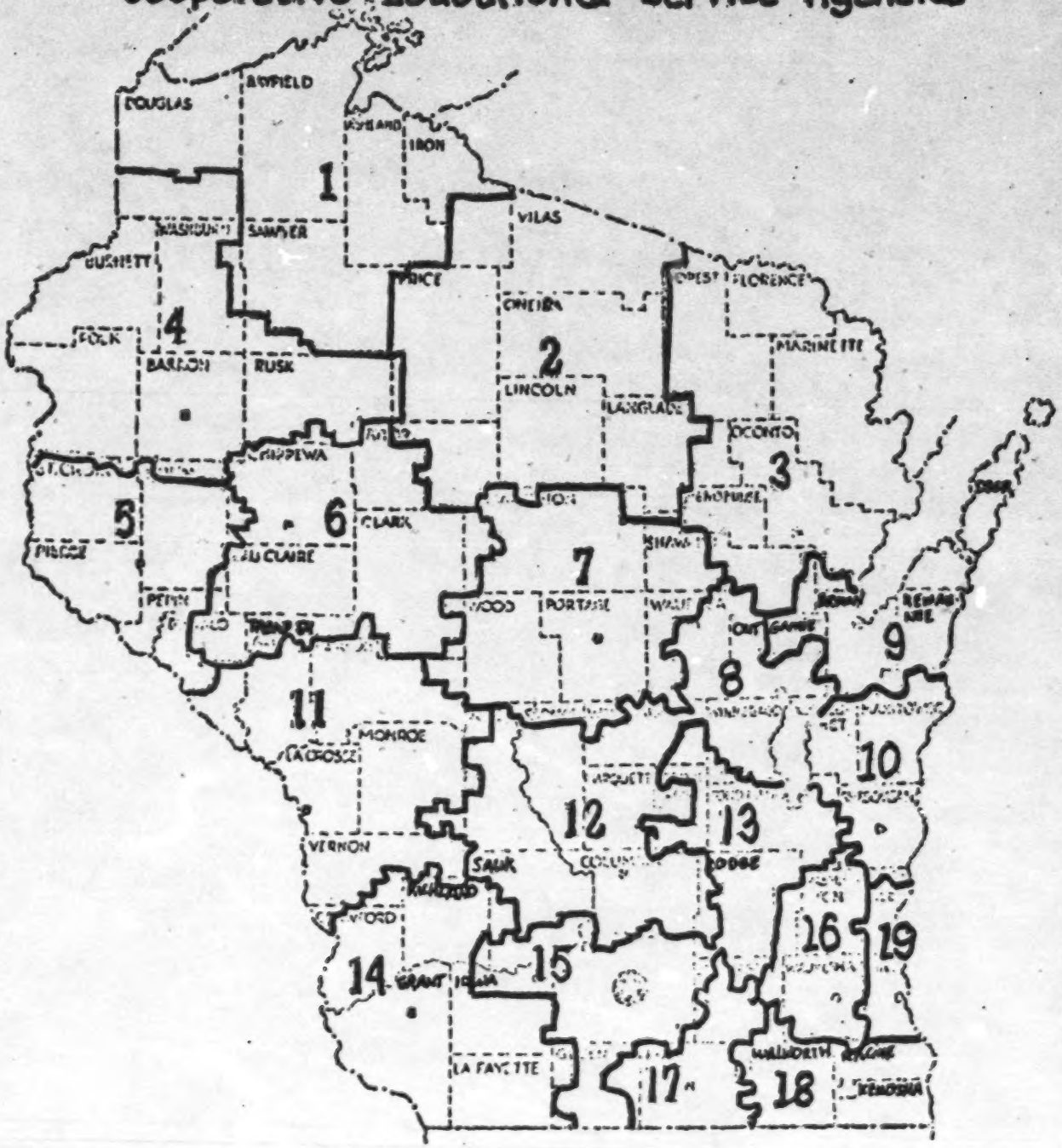
APPENDIX F

WISCONSIN

Cooperative Educational Service Agencies



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